Before the
Federal Communications Commission
Washington D.C. 20554

In the matter of	)	
	)	
Amendment of the Commission's Part 90 Rules	)	WT Docket No. 06-49
In the 904-909.75 and the 919.75-928 MHz Bands	)	

To: The Commission

Comments of
John Scrivner
Mt. Vernon. Net, Inc.

As has been noted in this proceeding, the unlicensed use of 902-928 MHz band has seen remarkable growth for a myriad of uses. I am a WISP operator who makes extensive use of this band for delivery of broadband Internet access into rural areas where trees and other obstructions would make this service impossible under any other circumstances. There is no other band that has the physics required to allow penetration of these obstacles at Part-15 lower power levels and this makes this band a crucial tool for WISP operators across the country who are working feverishly to build rural broadband where no other broadband options exist.

Another reason I use this band for broadband delivery is because spectrum analysis shows little use of the band outside of legacy paging systems and the occasional lower power consumer products in the band. In some cases we see a secondary rural broadband WISP operator in the same band. We do not have any concerns with this potential interference source, however, because we know that they operate on the same regulatory constraints that we do, namely Part 15 rules for unlicensed operation. This means they cannot cause us interference without getting interference themselves. With this regulatory "mutually assured destruction" framework in place it is easy to see why there is explosive growth for use of this band as an unlicensed platform for broadband delivery along with hundreds of other uses. Access to uncluttered and relatively vacant spectrum in this band has been crucial to my ability to serve the broadband needs of the rural public in my area of Southern Illinois.

This band is the only sub-1 GHz space currently available to WISPs who, according to the latest Pew report, now serve the broadband needs of roughly

6 million home users in the United States. In my network roughly half of my fixed wireless broadband customers are served using a product known as Waverider 900 MHz radios to deliver broadband to my customers wirelessly. These customers range from Schools to Fire Departments to Village Halls to countless home and business users in rural Southern Illinois. These people have no other access to broadband and depend heavily on these connections. I have received a grant from the USDA for delivery of broadband in Bluford, Illinois using this 900 MHz fixed broadband wireless technology.

If there were higher powered licensees using this band I doubt I would have ever invested in the unlicensed 900 MHz equipment I use to offer broadband services. The low-power equipment I use is susceptible to loss of connections easily in the presence of interference. The Waverider system requires a good signal to noise ratio. Relatively low levels of interference could easily destroy the platform I have invested a half million dollars in to serve rural America broadband. Allowing other licensed users to run broadband and other uses of this band space at higher power levels than allowed under Part-15 rules could easily kill off the explosive growth we see now in this band due to the balanced and open access platform afforded by Part-15 rules. Changing the game now would likely lead to me abandoning this band for fear of wasting the money in a band space where my investment could be lost easily.

I see two possible courses of action to remedy the perceived lack of opportunity to the M-LMS licensees for not being able to make use of their licenses for profitable use. The first option would be to leave the rules as they are and invite the M-LMS license holders to come over and use the band under Part-15 rules just as millions of others have over the same timeframe that they have not done anything in the same band. If the Part-15 rules are not good enough for the licensees to make other advanced uses of the band space then one could argue that the Part-15 rules should be the subject at hand as opposed to the Part 90 rules which have not reaped any fruit from this band. Unlicensed has proven to be a more effective policy framework than the rules as established for the M-LMS band. The easiest and most prudent course is to simply allow the M-LMS licenses to go away and for those with an interest in using the band, as others have, to use the band under the same policy guidelines as those of us who are making this work under Part-15.

Another possible course of action which could give advantages to the M-LMS licensees and current Part-15 operators would be to create a new regulatory option for use of the band where anyone could work toward gaining a license for the 902-928 band. This would be a departure from normal licensing as we know it but I feel it is worth consideration. This could be easily described as “Public Interest Licensing”.

In this Public Interest Licensing framework any user of the band could buy equipment and launch services without a license, in essence running as a Part-15 user does now under the same constraints and lack of interference protections. Registration of a base station for delivery of services would be required if an operator was planning to seek a license for this base station in the future. A maximum channel space of 6 MHz would be imposed per base station so as not to occupy all the band space for one carrier. This gives potential concurrent Part-15 users space to continue operations in a given location. If an operator wishes to gain a license for a location then he would provide a report (via a sub-section of Form 477) which would give the latitude and longitude of a base station and disclose the number and type of customers served off of that location. A set minimum quantity of customers served would be required by an operator for them to request and gain licensed use of that channel in that geographic location.

Once there is a "Public Interest License" issued for a base station location where an operator has proven to be effectively serving customers and other users of the band have either coordinated with the operator or have not had interference issues, the operator would have the right to run at a higher power level equal to 10 db higher than normal Part-15 regulations. This relaxation of the rules would be contingent upon a "Promise of Interference Mitigation" by the license holder to work with anyone who may be harmed by the added power used. The "Promise of Interference Mitigation" is only valid if an operator runs at the higher power level. For those who agree to run at the standard Part-15 levels there will be no "Promise of Interference Mitigation" and the licensees will only be bound to other higher level primary licensee's complaints of interference in the band.

Operators who get a "Public Interest License" would hold the license for perpetuity unless the customers served off of the base station stop using the service or the operator is found to not be offering good services, charging too much for service, not working with other interests in a fair and equitable way for interference mitigation, and generally not working to serve the public good with the license they have been granted. This focus on serving the public interest puts licensing requirements squarely where they should always be. This puts the good of the public above any other interest.

This would give M-LMS operators an opportunity to build out and use the band to deliver newer advanced services as well gain and maintain licensed status and higher power for the locations served. It would also allow other Part-15 users currently running advanced wireless services an opportunity to move toward some level of regulatory protections in the areas they are serving now.

I can see no advantage given to the public in simply modifying the terms of M-LMS licenses as outlined in the NPRM. I can see the possibility of causing harm to the public if the modifications slow rural broadband deployment by unlicensed operators or cause interference that cannot be avoided or mitigated easily. With the upside of the NPRM being minimal at best and the downside possibility being great I think that the NPRM as written should be avoided and either one of the possible remedies, M-LMS operators going straight Part-15 or developing and implementing a “Public Interest License”, as outlined above, would be the most prudent course of action going forward in developing some value for M-LMS and public good from this NPRM..

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